[0082] FIG. 24F shows a perspective view of a diced final device 2400.

[0083] FIG. 25A shows a perspective view of an embodiment 2500 of the present invention having an integrated circuit overlaid with a battery.

[0084] FIG. 25B shows a plan view of IC 2540.

[0085] FIG. 25C shows an elevational view of IC 2540.

[0086] FIG. 25D shows a plan view integrated battery-IC 2501.

[0087] FIG. 25E shows an elevational view of integrated battery-IC 2501.

[0088] FIG. 25F shows a block diagram of a layer-deposition system 2560.

[0089] FIG. 25G shows a perspective view of a processed sheet 2569.

[0090] FIG. 26A shows a perspective view of an embodiment 2600 of the present invention having an integrated circuit overlaid on its back with a battery.

[0091] FIG. 26B shows a block diagram of a layer-deposition system 2660.

[0092] FIG. 26C shows a perspective view of a processed sheet 2669.

[0093] FIG. 26D shows a perspective view of diced final devices 2600.

[0094] FIG. 26E shows a perspective view of wired diced final device 2600.

[0095] FIG. 26F shows a perspective view of a hearing aid 2690 incorporating a wired diced final device 2600.

[0096] FIG. 27A shows a plan view of a starting substrate of an embodiment that will have an integrated battery and device sharing a common terminal.

[0097] FIG. 27B shows a plan view of the substrate of FIG. 27A after deposition of the integrated battery and device sharing a common terminal.

[0098] FIG. 27C shows a plan view of the substrate of FIG. 27B after placing and wiring a separately fabricated chip connected to the integrated battery and device sharing a common terminal.

[0099] FIG. 27D shows a plan view of the substrate of FIG. 27C after placing and wiring a loop antenna.

[0100] FIG. 27E shows a plan view of the substrate of FIG. 27D after a top encapsulation layer has been deposited.

[0101] FIG. 27F shows an elevation view of the starting substrate of FIG. 27A.

[0102] FIG. 27G shows an elevation view of the partially built device of FIG. 27B.

[0103] FIG. 27H shows an elevation view of the partially built device of FIG. 27C.

[0104] FIG. 27I shows an elevation view of the partially built device of FIG. 27D.

[0105] FIG. 27J shows an elevation view of the device of FIG. 27E.

[0106] FIG. 27K shows an perspective view of the device of FIG. 27E at a magnetic-recharging station.

[0107] FIG. 27L shows an perspective view of the device of FIG. 27E at a light-recharging station.

[0108] FIG. 27M shows a schematic of the device of FIG. 27E at a radio-wave-recharging station.

[0109] FIG. 28A shows an elevation view of a battery 2800 having stacked cells.

[0110] FIG. 28B shows a plan view of a single battery cell after recycling.

[0111] FIG. 28C shows a process 2810 used for recycling.

[0112] FIG. 29A shows a block diagram of a layer-deposition system 2960.

[0113] FIG. 29B shows a perspective view of a partially processed wafer 2964.

[0114] FIG. 29C shows a block diagram of a layer-deposition system 2965.

[0115] FIG. 29D shows a perspective view of a processed wafer 2969.

[0116] FIG. 29E shows a block diagram of a layer-deposition system 2965.

[0117] FIG. 29F shows a perspective view of a partially processed wafer 2974.

[0118] FIG. 29G shows a block diagram of a layer-deposition system 2960.

[0119] FIG. 29H shows a perspective view of a processed wafer 2979.

[0120] FIG. 29I shows a perspective view of wired diced final device 2600.

[0121] FIG. 30 is a perspective view of an implantable device according to this invention.

[0122] FIG. 31 A is an exploded perspective view of a pacemaker according to this invention.

[0123] FIG. 31B is an exploded perspective view of a pacemaker as it is being formed during a series of steps according to this invention.

[0124] FIG. 32A is a perspective view of a first embodiment of a watch of the invention.

[0125] FIG. 32B is a perspective view of a second embodiment of a watch.

[0126] In the drawings, like numerals describe substantially similar components throughout the several views. Signals and connections may be referred to by the same reference number, and the meaning will be clear from the context of the description.

DETAILED DESCRIPTION

[0127] In the following detailed description of the preferred embodiments, reference is made to the accompanying drawings that form a part hereof, and in which are shown, by way of illustration, specific embodiments in which the invention may be practiced. It is to be understood that other